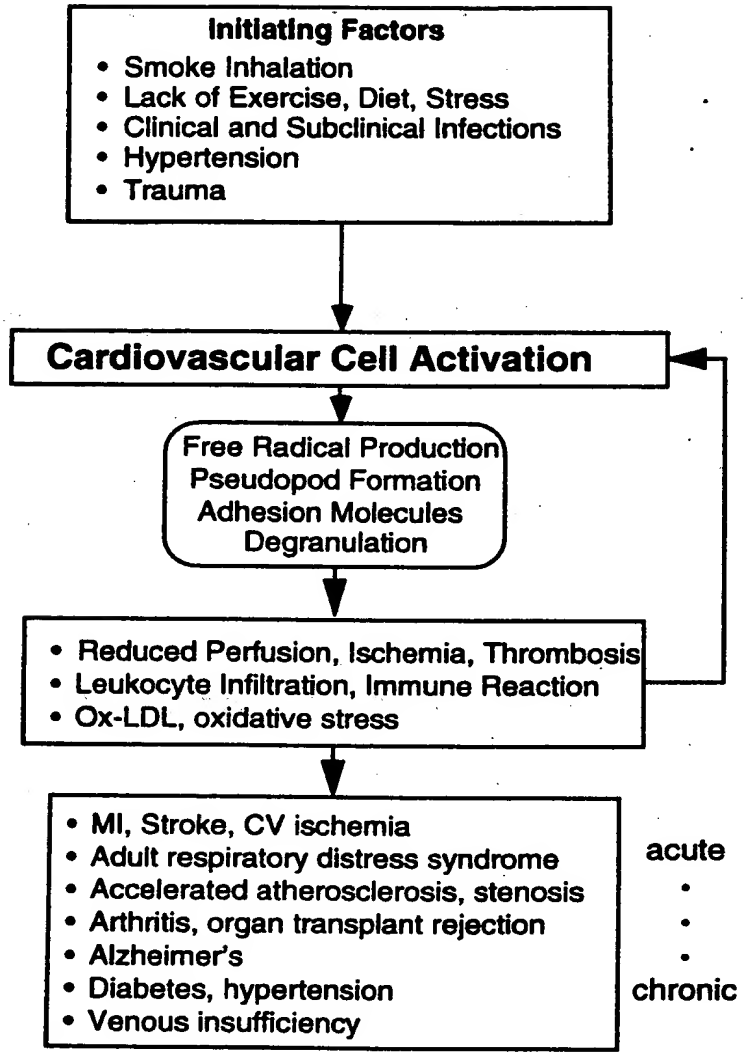
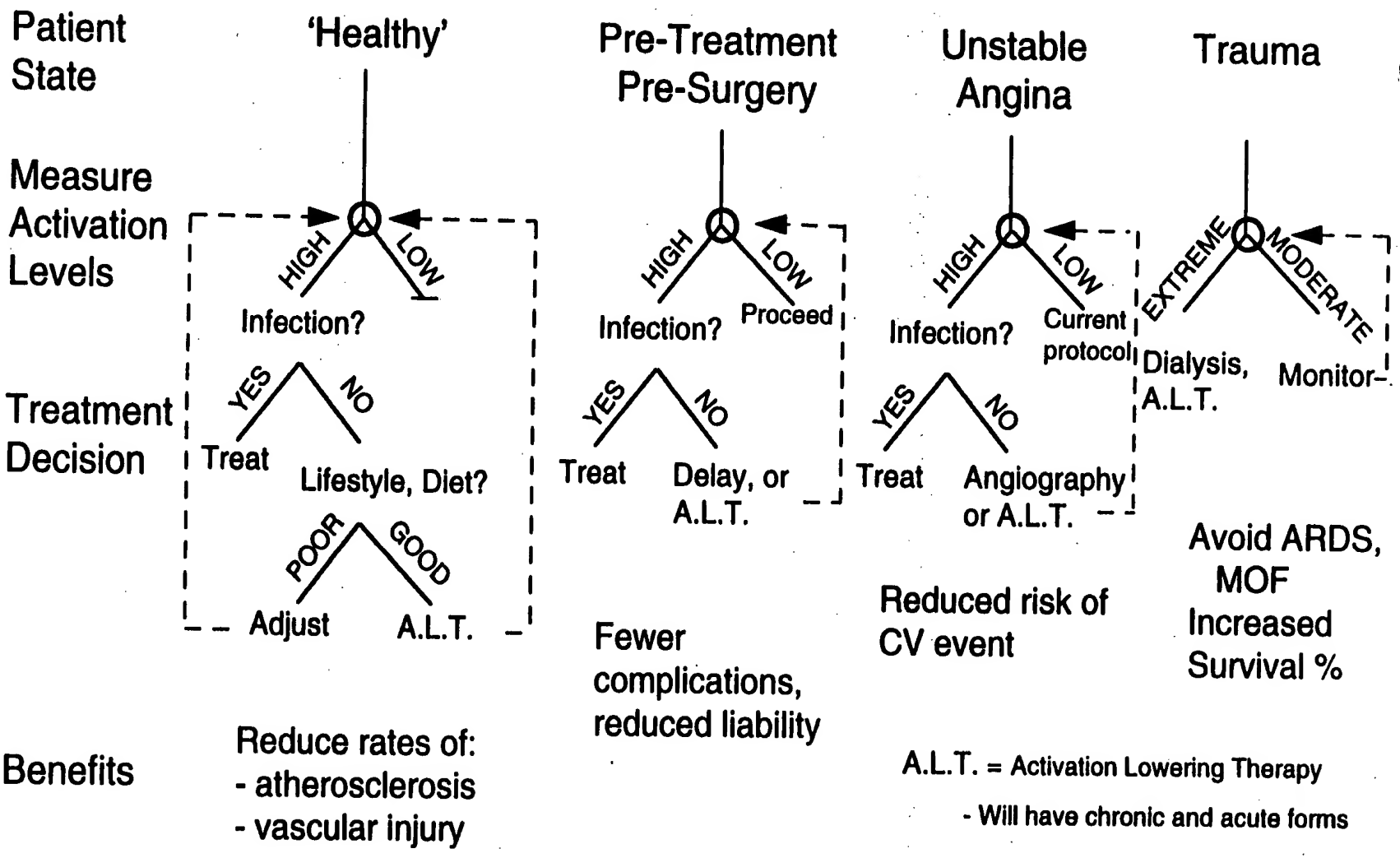

Initiating Factors
• Smoke Inhalation
• Lack of Exercise, Diet, Stress
• Clinical and Subclinical Infections
• Hypertension
• Trauma
Cardiovascular Cell Activation
Free Radical Production
Pseudopod Formation
Adhesion Molecules
Degranulation
• Reduced Perfusion, Ischemia, Thrombosis
• Leukocyte Infiltration, Immune Reaction
• Ox-LDL, oxidative stress
• MI, Stroke, CV ischemia
• Adult respiratory distress syndrome
• Accelerated atherosclerosis, stenosis
• Arthritis, organ transplant rejection
• Alzheimer's
• Diabetes, hypertension
• Venous insufficiency
acute
•
•
•
chronic

FIGURE 1

FIGURE 2

Cell Activation Diagnostic and Therapy Points



A.L.T. = Activation Lowering Therapy

- Will have chronic and acute forms

FIGURE 3a

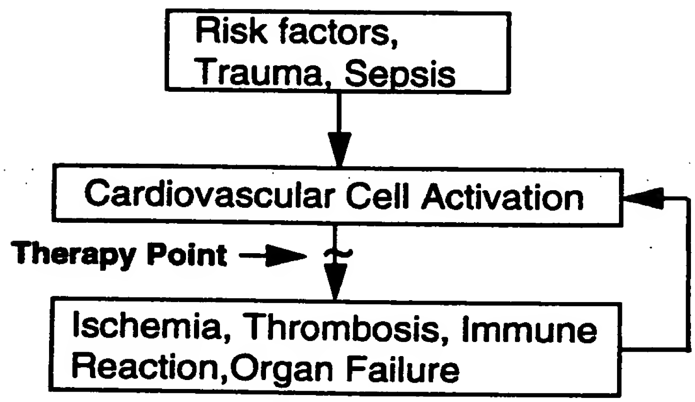


FIGURE 3b

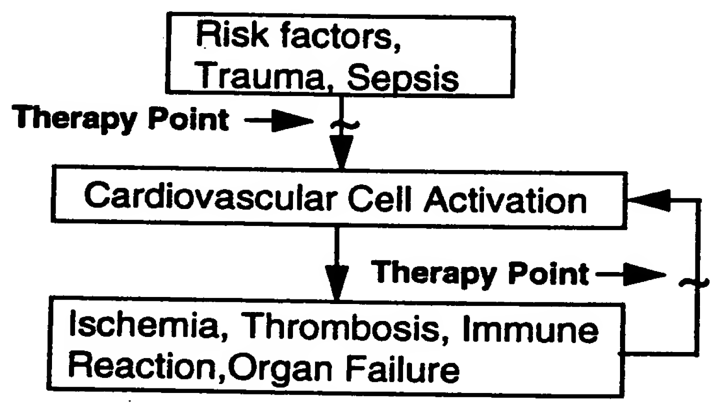
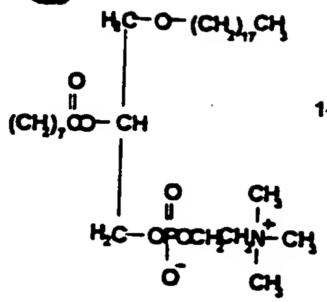
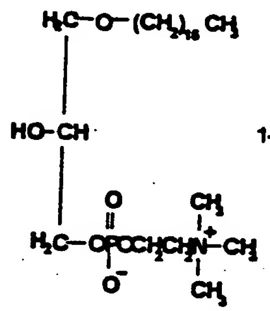


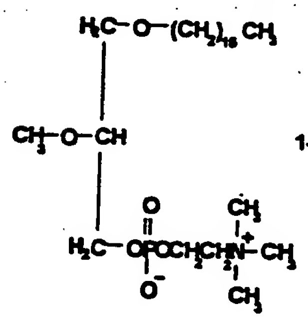
FIGURE 4



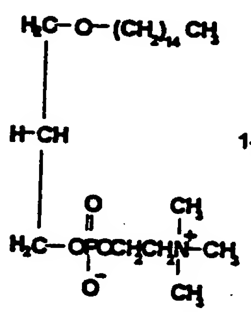
1-O-octadecyl-2-azelaoryl-sn-glycero-3-phosphocholine



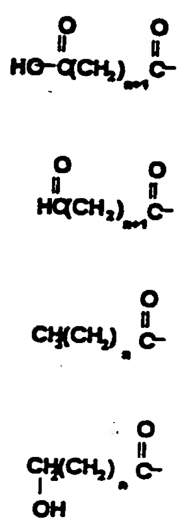
1-O-alkyl-2-lyso-sn-glycero-3-phosphocholine
(lyso-PAF)

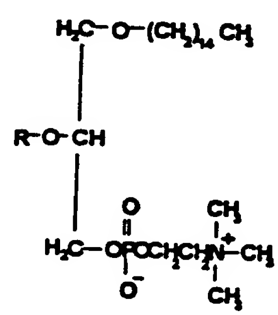


1-O-alkyl-2-O-methyl-sn-glycero-3-phosphocholine



1-0-acyl-2-desoxy-sn-glycero-3-phosphocholine





derived from:
docosahexaenoic acid-containing phosphatidylcholine (n=1),
arachidonic acid-containing phosphatidylcholine (n=2), and
linoleic acid-containing phosphatidylcholine (n=6)

FIGURE 5a

Letter Key for peptide origin:

b = bovine
h = hamster
m = man
o = other
r = rat

SR	p	chymotrypsinogen A(14-15)
AR	p	chymotrypsinogen B(14-15)
TNA	b	neochymo A autoactivation(147-9)
NAL	b	neochymo B autoactivation(147-9)
AL	b	neochymo B autoactivation(148-9)
TPTDDDDK	o	anionic trypsinogen activation peptide
FPLDDDDK	o	cationic trypsinogen activation peptide
FPVDDDDK	b	cationic trypsinogen activation peptide
APFDDDDKI	h	trypsinogen residue (human)
APFDDDDK	h	trypsinogen 2 peptide
DDDDK	h	trypsinogen 3 peptide
CGVPAIQPVLSGLSR	b	chymotrypsinogen A sigtransduction
CGVPAIPPVLSGLSR	p	chymotrypsinogen A sigtransduction
CGVPAIQPVLSGL	b	chymotrypsinogen B sigtransduction
CGVPAIPPVLSGLSR	p	chymotrypsinogen B sigtransduction
CGVPSIPPNLS	p	chymotrypsinogen C sigtransduction
CGVPAIKPALBFB	p	chymotrypsinogen D sigtransduction
MAFLWLVSCFALVGATFG	r	chymotrypsinogen B sigtransduction
MLRFLVFASLVLYGHS	r	proelastase 1 sigtransduction
MIRALLLSTLVAGALS	p	proelastase 2 sigtransduction
CGYPTYEVQHDVSR	r	proelastase 2
TQDFPETNAR	r	proelastase 1
DFPETNAR	r	proelastase 1
CGLPANLPQLPR	p	proelastase 2
CGDPTYPPYVTR	m	proelastase 2A
CGVSTYAPDMSR	m	proelastase 2B
FPVDDDDK	p	trypsinogen
VDDDDK	b	trypsinogen
DSGISPR	m	prophospholipase A2
EEGISSR	p	prophospholipase A2
EAGLNSR	b	prophospholipase A2
GISPR	o	prophospholipase A2 (horse1)
ENGISPR	o	prophospholipase A2 (horse2)
EHP	m	thyrotropin-releasing
EHWSYGLRPG	m	gonadtropin-releasing
VHLSAEEKEA	m	growth-hormone-releasing
AGCKNFFWKTFTSC	m	somatostatin
CYIQNCPRG	m	vasotocin
CYIQNCPLG	m	oxytocin
HSQGTFTSDYSKYLDSRRAQDFVQWLMNT	m	glucagon
RPPGFSPFR	m	bradykinin
HSDGTFTSELSRLRDSARLQRLLQGLV	m	secretin
ISDRDYMGWMDF	m	cholecystokinin-pancreozymin (C-terml)
SDNNQQGKSAQQGGY	m	scotophobin
ECG	m	gluthatione

FIGURE 5b

SYSMEHFRWGKPVGKKRRPVKVYPNGAEDELAEAFPLEF	p adrenocotricotropin
SYSMEHFRWGKPVGKKRRPVKVYPNGAEDESAUAFPLEF	m adrenocotricotropin
SYSMEHFRWGKPVGKKRRPVKVYPNGEAEDSAQAFPLEF	b adrenocotricotropin
SYSMEHFRWGKPV	m MSH
DIGYS	p CRP-I (C-reactive protein)
SWESA	p CRP-II (C-reactive protein)
KPQLWP	p CRP-III not reactive (C-reactive protein)
LFEVPEVT	p CRP-IV not reactive (C-reactive protein)
VGGSEI	p CRP-V not reactive (C-reactive protein)
WDFV	p CRP-VI (C-reactive protein)
NMWDFV	p CRP-VII (C-reactive protein)
LVAGD	m leukotaxin (no sequence order)
RKPVLYATNGSQDC	m leukocyte promotion factor
SYSM	m ACTH fragment
BMLF	o fMLP (chemotactic factor)
TN	b chymotrypsinogen A (247-8)
SHLVE	o peptidetide cleaved by chymo C
AKKK	o peptidetide cleaved at brushborder
AAAA	o peptidetide cleaved at brsuhborder
KKKK	o peptidetide cleaved at brushborder
AKKKK	o peptidetide cleaved at brushborder
KKKKK	o peptidetide cleaved at brushborder
LWMRFA	o peptidetide cleaved at brushborder
KKKKKK	o peptidetide cleaved at brushborder
VAAKIVG	o peptidetide cleaved at brushborder
VCGE	o insulin B fragment
LCGS	o insulin B fragment
LVCG	o insulin B fragment
ELR	o neutrophil chemotactic peptide
ELRC	o neutrophil chemotactic peptide
AELR	o part of NAP-2
SSSGEHFEGEKVFHVNVEDENDIQ	p pro-carboxypeptidase B
KEDFVGHQVLRISVDDEAQVQKVKEL	p carboxypeptidase A activation peptide
MAGRGGSRVLALCAALAAGGWLLAA	r carboxypeptidase E signal peptide
KEDFVGHQVLRITAADEAEVQ	p pro-carboxypeptidase A
TTGHSYEK	p cleavage procarboxypeptide B
SVLEAQFDSR	p cleaved F4 procarboxpeptidase B
HHDGEHFEGEKVFR	p cleaved procarboxypeptidase B
YVTR	h proelastase
VVGG	h proelastase 2
YVTR	h proelastase activation sequence
AAPPRGR	o profactor D fragment
APPRGR	o profactor D fragment
STFWAYQPDGDNDPTDYQKYEHTSSPSQLLAPGDYPCVIE	r CCK-releasing factor
GRGDSP	o integrin endothelial (RGD)
GRGESP	o integrin endothelial (RGE)
APGPR	r enterostatin (gut)
vpgpr	r enterostatin (pancreas)
FMRF	o mulluscan cardioexcitatory
LRDRDDIA	r C-terminal glucagon pancreatic peptide
APVD	r glucagonoma precursor

FIGURE 5c

EHPG	r Thyrotropin Re Hormone
GGGPPS	h composition of aa gliadin
GGGPPY	h composition of aa gliadin
KRNRNNIA	o proglucagon
HRRQL	o preprogastrin, preproCCK
GLY	o pancreatic peptide cleavage produce
YPALPEAPGEDASPDDLSRYYASLRHYLDLVTRQRY	o PYY (pancreatic peptide YY)
SYSM	o adrenocorticotropin hormone fragment H
YMEHFRW	o adrenocorticotropin hormone fragment H
DRVYIHP	p Angiotensin II fragment
VYIHPF	o Angiotensin II fragment horse
RVYIHPI	p Angiotensin III fragment
VIHN	p Angiotensinogen fragment
RPPGF	o bradykinin fragments 1-5
RPPGFS	o bradykinin fragments 1-6
RPPGFSP	o bradykinin fragments 1-7
PPGFSP	o bradykinin fragments 2-7
AGSE	o chemotactic factor for eosinophils
VGSE	o chemotactic factor for eosinophils
BMLFF	o fMLP w/ Phe group
BMMM	o fMLP class
VGDE	o fMLP class
YGGFLK	o leucine enkephalin lys
YSGFLT	o ser-leu enkephalin-thr
YGGFMRF	o met enkephalin arg phe
YMGFP	o D-met, pro enkephalinamide
RGDS	o supports fibroblast attachment
GRGDTP	o supports fibroblast attachment
WMDF	o CCK fragment 30-33
LRPG	o leutenizing hormone fragment
HTATFK	o alpha-melanocyte stimulatory hormone
SMEVRGW	o delta-melanocyte stimulatory hormone
YPFVEPIH	o beta-casomorphin
YPF	o beta-casomorphin fragment 1-3
YAFAY	o D-ala,tyr- fragment 1-5 amide
YRFK	o D-arg,lys fragment 1-4 amide
TRSAW	h hypercalcemia of malignancy factor
RPKP	o substance P fragment 1-4
QQFFGLM	o substance P fragment 5-11
FFGLM	o substance P fragment 7-11
RKDVY	o thymopoietin II fragment 32-6
DKWEL	o U5 peptide
HKGKAR	h C3a 72-77 fragment
CVIKF	o hydra peptide fragment 7-11
FTPRL	o leukopyrokinin fragment 4-8
KQAGDV	o RGD related peptide
KEEAE	o lys-thymosin alpha1 fragment
KYK	o responsible for nicks at purine in DNA
FLEEI	r prothrombin precursor 5-9
WHWLQL	o alpha1 mating factor fragment